

### **REMARKS**

In the Office Action dated July 22, 2003, the Examiner: (1) provisionally rejects claims 1 –22 under the judicially created doctrine of obviousness-type double patenting; (2) rejects claims 1 –7, 12 – 16 and 24 –26 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over DE 1234234; (3) rejects claims 1, 2, 4, 6, 8, 10, 12 and 17 –23 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Stramel (US 5,397,391); (4) rejects claims 1 – 9, 12 – 18, 21 – 27, 29, 31, 33, 35, 37, 39, 45 and 46 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Menovcik (US 5,876,493); (5) rejects claims 1- 18, 21 – 27, 29, 31, 33, 35, 37, 39, 45 and 46 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Menovcik (US 5,876,493); (6) rejects claims 28, 30, 32, 38, 40, 47 and 48 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Dupuis *et al.* (US 5,553,630), Losoi (US 5,165,995) or Sole *et al.* (US 4,500,361); (7) rejects claims 28, 30, 32, 34, 36, 38, 40, 47 and 48 under 35 U.S.C. § 103(a) as obvious over Dupuis *et al.* (US 5,553,630), Losoi (US 5,165,995) or Sole *et al.* (US 4,500,361) in view of Menovcik *et al.* (US 5,876,493); (8) rejects claims 1, 2, 17, 21, 23, 27, 28, 37 –40 and 45 –48 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Abeck *et al.* (US 3,652,354); (9) rejects claims 1, 2, 17, 19, 21, 23, 27, 28, 37 – 48 under 35 U.S.C. § 103(a) as obvious over Abeck *et al.* with or without Stramel; (10) rejects claims 1 –7, 12 –20 and 23 –26 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Johnson *et al.* (US 5,466,482); and (11) rejects claims 1 –7 and 12 –26 under 35 U.S.C. § 103(a) as obvious over Johnson *et al.*

Applicants have cancelled claims 1 – 26, without prejudice, reserving the right to prosecute them at a later time, and have amended claims 29 – 36 and 41 – 44 to replace the term “A” with “The.” Applicants have also changed “organo-phosphate acid” to

“organometaphosphate” in claims 28 and 38 and deleted the term acid in claim 48 to provide proper antecedent bases. No new matter has been added.

With respect to the specific rejections identified above, Applicants respond as follows:

**Response to Nonstatutory Double Patenting Rejection**

The Examiner provisionally rejects claims 1 –22 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 68 –95 of co-pending Application Serial No. 09/723,098. Applicants express no opinion as to the merits of this rejection. However, in light of Applicants’ having canceled claims 1 – 26, Applicants respectfully submit that this rejection is moot.

**Response to Rejection of claims 1 –7, 12 – 16 and 24 –26 over DE 1234234**

The Examiner rejects claims 1 – 7, 12 – 16 and 24 –26 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over DE 1234234. Applicants express no opinion as to the merits of this rejection. However, in light of Applicants’ having canceled claims 1 – 26, Applicants respectfully submit that this rejection is moot.

**Response to Rejection of claims 1, 2, 4, 6, 8, 10, 12 and 17 –23 over Stramel**

The Examiner rejects claims 1, 2, 4, 6, 8, 10, 12 and 17 – 23 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Stramel (US 5,397,391). Applicants express no opinion as to the merits of this rejection. However, in light of Applicants’ having canceled claims 1 – 26, Applicants respectfully submit that this rejection is moot.

**Response to Rejection of claims 1-9, 12 –18, 21 –27, 29, 31, 33, 35, 37, 39, 45 and 46 over Menovcik**

The Examiner rejects claims 1 – 9, 12 – 18, 21 – 27, 29, 31, 33, 35, 37, 39, 45 and 46 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative under 35 U.S.C. § 103(a) as obvious over Menovcik (US 5,876,493). To the extent that this rejection applies to claims 1 –9, 12 –18, and 21 – 26, Applicants submit that the rejection is moot in light of Applicants' having canceled claims 1 –26.

With respect to the remaining rejected claims, (claims 27, 29, 31, 33, 35, 37, 39, 45 and 46) Applicants respectfully disagree with the Examiner's bases for rejection. In order for a reference to be anticipatory under 35 U.S.C. § 102(b), the reference must disclose every element of the claim. Claims 27 and 45 and the claims that depend on them contain the limitation "wherein the organo-phosphoric acid compound is present in an amount from about 0.01 percent to about 5 percent by weight based on the weight of the pigmentary base." Because the Examiner has not identified any portion of the reference that describes the recited limitation of the amount of organo-phosphoric acid compound, a rejection under section 102 is improper.

Additionally, Applicants respectfully submit that claims 27, 29, 31, 33, 35, 37, 39, 45 and 46 are not obvious over Menovcik. Menovcik is directed to a method for "stabilizing inorganic pigments in aqueous media, and the treated pigment obtained thereby." Column 1, lines 41 – 43. The disclosed ratio of treatment to pigmentary base in that reference suggests that there is threshold level of treatment that is necessary in order to keep the pigment free flowing and to prevent the pigmentary base from becoming disassociated from the treatment. More specifically, Menovcik describes that the polyester, pyrophosphate ester or phosphate ester should be present in an amount between 25.0 and 50.0% by weight, preferably between 30 and 40% by weight, while the inorganic pigment should be present in an amount between 10.0 and 45% by weight, preferably in an amount between 25 and 35% by weight. Column 4, lines 15 –25. All

weights are based on the weight of the pigment dispersion. Thus, the ratio of the treatment to the inorganic pigment is between 0.56:1 and 5:1. By delineating this relatively high ratio of treatment to pigmentary base, the reference implies that significant departure from this ratio would not confer the stated benefit of stabilization.

By contrast, Applicants' claimed invention is directed to treated pigments in which the ratio of organo-phosphoric acid compound relative to the pigmentary base is between 0.0001:1 and 0.05:1. Thus, even when the treated pigments of Applicants' claimed invention have their greatest amount of organic treatment, they still have an order of magnitude less treatment than those of Menovcik. Furthermore, the use of the amount of treatment as disclosed in Menovcik in Applicants' invention would change the nature of the treated pigment and render it impractical for many applications, including thermoplastics applications. For example, if the amount of treatment is too high, there will be difficulty in dispersing it into thermoplastics.

Thus, Menovcik teaches away from Applicants' invention as embodied in claims 27 and 45, as well as in the claims that depend on claims 27 and 45. Accordingly, Applicants respectfully submit that this rejection should be withdrawn.

**Response to Rejection of claims 1-18, 21-27, 29, 31, 33, 35, 37, 39, 45 and 46 over Menovcik**

The Examiner rejects claims 1- 18, 21 – 27, 29, 31, 33, 35, 37, 39, 45 and 46 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative under 35 U.S.C. § 103(a) as obvious over Menovcik (US 5,876,493). To the extent that this rejection applies to claims 1 –9, 12 –18, and 21 – 26, Applicants submit that the rejection is moot in light of Applicants' having canceled claims 1 –26.

Furthermore, for the reasons provided above, Applicants submit that Menovcik does not teach, disclose or otherwise suggest Applicants' invention as claimed in claims

27 or 45 or the claims that depend on them. Accordingly, Applicants respectfully submit that this rejection should be withdrawn.

**Response to Rejection of claims 28, 30, 32, 38, 40, 47 and 48 over Dupuis, Losoi or Sole**

The Examiner rejects claims 28, 30, 32, 38, 40, 47 and 48 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Dupuis *et al.* (US 5,553,630), Losoi (US 5,165,995) or Sole *et al.* (US 4,500,361). Applicants respectfully disagree with the Examiner's bases for rejection.

In order for a reference to be anticipatory under 35 U.S.C. § 102(b), the reference must disclose every element of the claim. The cited references name inorganic phosphates. *See* Dupuis, column 2, line 19 (sodium hexametaphosphate); Losoi, column 4, line 15 (hexametaphosphate), Sole, column 7, line 38 (zinc hexametaphosphate), column 8, lines 63-64 (cadmium phosphate and cadmium hexametaphosphate).

By contrast, claims 28 and 47, and the claims that depend on them are directed to pigments that have an organometaphosphate compound as a treatment. Applicants note that claims 28 and 47 specifically require that within any organometaphosphate compound "at least one of the R" groups is not hydrogen."

Because the Examiner has not identified any organometaphosphate compounds in the cited references, Applicants respectfully submit that none of the references disclose all of the limitations of the rejected claims, and the rejections under 35 U.S.C. § 102(b) should be withdrawn.

Furthermore, the Examiner has not described how the disclosure of the use of an inorganic phosphate compound teaches, discloses or otherwise suggests the use of an organometaphosphate compound. Applicants note that inorganic phosphates are hydrophilic. By contrast, the organometaphosphates of the claimed invention contain

hydrophobic portions. Thus, unlike inorganic phosphates, when used as a treatment they facilitate the incorporation of pigments into hydrophobic polymers such as polyethylene and other hydrophobic thermoplastics. Because inorganic phosphates and organic phosphates are different compounds that impart different attributes to pigments, the use of inorganic phosphates in the cited references does not teach, disclose or otherwise suggest the use of the claimed organometaphosphate compounds. Accordingly, Applicants respectfully submit that this rejection should be withdrawn.

**Response to Rejection of claims 28, 30, 32, 34, 36, 38, 40, 47 and 48 over Dupuis *et al.* (US 5,553,630), Losoi (US 5,165,995) or Sole *et al.* (US 4,500,361) in view of Menovcik *et al.* (US 5,876,493).**

The Examiner rejects claims 28, 30, 32, 34, 36, 38, 40, 47 and 48 under 35 U.S.C. § 103(a) as obvious over Dupuis *et al.* (US 5,553,630), Losoi (US 5,165,995) or Sole *et al.* (US 4,500,361) in view of Menovcik *et al.* (US 5,876,493). For the reasons provided above, Applicants respectfully submit that because Dupuis, Losoi and Sole only disclose treatments with inorganic phosphates, they do not teach, disclose or otherwise suggest treatment with the claimed organometaphosphates. Furthermore, Menovcik does not teach, disclose or otherwise suggest the claimed organometaphosphates, and as described above Menovcik does not disclose a treated pigment in the claimed proportions and in fact teaches away from such a use. Therefore, the cited references do not alone or in combination teach, disclose or otherwise suggest the claimed invention. Moreover, because Menovcik teaches away from using a treated pigment with the claimed amount of organometaphosphate compound, there is no motivation to combine it with any of the other references in order to suggest the claimed invention.

**Response to Rejection of claims 1, 2, 17, 19, 21, 23, 27, 28, 37 –40 and 45 –48 over Abeck *et al.* (US 3,652,354)**

The Examiner rejects claims 1, 2, 17, 21, 23, 27, 28, 37 –40 and 45 –48 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Abeck *et al.* (US 3,652,354). To the extent that this rejection applies to claims 1, 2, 17, 21 and 23, Applicants submit that the rejection is moot in light of Applicants' having canceled claims 1 –26.

To the extent that this rejection applies to claims 27, 28, 37 –40 and 45 –48 Applicants respectfully disagree with the Examiner's bases for rejection. As with Dupuis, Losoi, and Sole, Applicants respectfully submit that the Examiner has mistakenly equated the disclosure of inorganic phosphate treatments with the disclosure of organo-phosphoric acid compounds and organometaphosphates. For the reasons described above, Applicants respectfully submit that the disclosure of inorganic phosphate compounds does not teach, disclose or otherwise suggest the disclosure of organo-phosphoric acid compounds and organometaphosphates. Therefore, Applicants respectfully submit that Abeck does not teach, disclose or otherwise suggest the claimed treated pigments, and this rejection should be withdrawn.

**Response to Rejection of claims 1, 2, 17, 19, 21, 23, 27, 28, 37 – 48 over Abeck *et al.* with out without Stramel**

The Examiner rejects claims 1, 2, 17, 19, 21, 23, 27, 28, 37 –48 under 35 U.S.C. § 103(a) as obvious over Abeck *et al.* with or without Stramel. To the extent that this rejection applies to claims 1, 2, 17, 19, 21 and 23, Applicants submit that the rejection is moot in light of Applicants' having canceled claims 1 –26.

To the extent that this rejection applies to claims 27, 28, 37 –40 and 45 –48 Applicants respectfully disagree with the Examiner's bases for rejection. For the reasons

noted above Applicants respectfully submit that Abeck does not teach, disclose or otherwise suggest the claimed pigments.

The Examiner cites Stramel for the disclosure of a phosphate treated pigment in polyethylene. However, even if Stramel were combined with Abeck, one would not obtain the claimed pigment because neither reference discloses the treatments of the claimed pigments. Accordingly, Applicants respectfully submit that this rejection should be withdrawn.

**Response to Rejection of claims 1-7, 12 -20 and 23 -26 over Johnson *et al.***

The Examiner rejects claims 1 -7, 12 -20 and 23 -26 under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Johnson *et al.* (US 5,466,482). Applicants express no opinion as to the merits of this rejection. However, in light of Applicants' having canceled claims 1 -26, this rejection is moot.

**Response to Rejection of claims 1-7 and 12 -26 over Johnson *et al.***


The Examiner rejects claims 1 -7 and 12 -26 under 35 U.S.C. § 103(a) as obvious over Johnson *et al.* Applicants express no opinion as to the merits of this rejection. However, in light of Applicants' having canceled claims 1 -26, this rejection is moot.



Applicants: El-Shoubary *et al.*  
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Applicants submit that no fee is required in connection with the filing of this Amendment and Response. If any fee is deemed necessary, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 11-0171.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Scott D. Locke", is written over a horizontal line.

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